

Application of Scientific Knowledge into Program Products

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Program Applications

- Indoor Environmental Quality for
 - Commercial/Institutional Buildings
 - *IAQ Building Education and Assessment Model*
 - Green Buildings
 - *Guidance for Green, High Performance, and Sustainable Buildings*
 - Schools
 - *Design Tools for Schools*

IEQ Program for Office/Institutional Buildings

- Relies principally on high quality guidance and tools (e.g. I-BEAM, Mold, Green Buildings)
 - Best state of the science
 - Practical, feasible
 - Responsive to user needs
- EPA is established leader
- Existing buildings—New construction.
- Hot topics:
 - Moisture and mold
 - Green Buildings

IAQ Building Education and Assessment Model (I-BEAM)

- Self contained guidance software
- Accessible on the Web
- Building managers/building professionals
- One Stop Shopping: Educational tools, management tools, detailed maintenance tools, budgeting tools.
- Web technology: navigational, search and link features
- Demonstration please

IEQ Green Building Guidance

- IAQ
 - Complex— hundreds of chemicals/ building features
 - Not a single measurement metric
- Green building movement
 - Growing rapidly - Green IAQ protocols becoming institutionalized, irrespective of quality
- EPA's Indoor Environments Division
 - Have published comprehensive guidelines for buildings, but not yet formulated for the green market
 - “Green IAQ Guidance” being developed

IEQ Green Building Guidance

- Planning and Design
- Facilitation of Future Operation and Maintenance (O&M) Functions
- IAQ Commissioning
- IAQ Control During Construction
- HVAC System
- Ventilation Rate and Controls
- Moisture Control
- Thermal Comfort and Humidity
- Enclosure Design
- Environmental Tobacco Smoke
- Pollutant and Pest Control
- Low Toxicity Products
- Indoor Lighting
- Interior Noise
- Occupant Control of Systems
- O&M Assistance
- Additional Outdoor Air
- Natural Ventilation
- Displacement Ventilation
- Dedicated Outdoor Air Supply
- Daylighting and Views

Status of IEQ Green Guidance

- Internal review complete
- Currently used for recommendations to Interagency Sustainable Workgroup for federal buildings
- Used as basis for recommendations to US Green Building Council
- External review in June 04

IEQ Program for Schools

- Tools for Schools Program
 - Comprehensive program of guidance, tech assistance, partnerships, peer to peer communications, awards
- Tools for Schools Kit for existing buildings
- Design Tools for Schools for new construction

Design Tools for Schools

- Web-based guidance
- School System/Design Professionals
- Structure
 - Backgrounder information—IAQ basics
 - Core Guidance for IAQ Design Features
 - Tool Kit
 - Links to further information inside and outside EPA
- Demonstration please

Conclusion

Good science is the foundation
for good policy